**Technical Design**

This project is built on maven and spring boot.

Four models **Airports**, **Airport**, **Country** and **Location** are created according to the structure of json.

A singleton class **AirportStore** is created as a cache, the first time when retrieveAirportList() is being called, it will send a HTTP GET request to retrieve the whole list of airport and store in airportList, the list will be used directly after that.

**API design:**

The JSON API is available at **localhost:8080/api/airports** after you start up the application locally.

Four optional filter parameters are created according to the requirement.

**countryCode: code of country**

**airportCode: code of airport**

**internationalAirport: if it is international airport, true/false**

**domesticAirport: if it is domestic airport, true/false**

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| **Description** | **Api** |
| Return a list of all airports | GET localhost:8080/api/airports |
| Return a list of airports which countryCode is AU | GET localhost:8080/api/airports?countryCode=AU |
| Return the airport which airportCode is BIP | GET localhost:8080/api/airports?airportCode=BIP |
| Return a list of airports which countryCode is AU and they are both international and domestic airports | GET localhost:8080/api/airports?countryCode=AU&internationalAirport=true&domesticAirport=true |

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